

In the United States Court of Federal Claims

No. 13-232C

(Filed: November 4, 2014)

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CAMERON LANNING CORMACK,)	Patent case; claim construction for
)	U. S. Patent No. 7,781,693
Plaintiff,)	
)	
v.)	
)	
UNITED STATES,)	
)	
Defendant,)	
and)	
)	
NORTHROP GRUMMAN SYS. CORP.,)	
)	
Defendant-Intervenor.)	
)	
*****)	

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OPINION AND ORDER

LETTOW, Judge.

In this patent case, plaintiff, Mr. Cameron Lanning Cormack, alleges that the United States, through the United States Postal Service (“Postal Service”), has infringed claims 1-5, 9-13, and 19 of U.S. Patent No. 7,781,693 (“the ’693 patent”), entitled “Method and System for Sorting Incoming Mail,” and is therefore liable for damages under 28 U.S.C. § 1498(a). Compl. at 2; Pl.’s Opening Claim Construction Br. (“Pl.’s Br.”) at i., ECF No. 66.¹ This opinion addresses claim construction for terms of the patent pertinent to the alleged infringement.²

BACKGROUND

The invention at issue is a method and system for sorting incoming mail. Compl. ¶¶ 5-6; Pl.’s Br. at 3. Mr. Cormack alleges that he invented and patented a sorting method that allows for the dynamic assignment of mailstops and receiving bins for use in automatic mail sorting systems. Compl. ¶ 5. He avers that his invention requires fewer receiving bins than traditional single-pass sorting systems by enabling the system to assign a receiving bin for each new mailstop while mail is being processed. Pl.’s Br. at 8-9. If all of the system’s receiving bins are already assigned when a mailpiece comes through, the system empties a receiving bin and assigns the new mailstop to the emptied bin. *Id.* at 18.

On August 24, 2010, the United States Patent and Trademark Office issued the ’693 patent to Mr. Cormack. Compl. ¶ 6. The patent consists of 25 claims, 11 of which are a subject of this action. Pl.’s Br. at i. Of these claims, Claims 1 and 10 are written in independent form. *Id.* Claim 1, the first independent claim, provides:

A method for sorting mailpieces in a single pass, the method comprising the steps of:

¹In pertinent part, Subsection 1498(a) of Title 28 provides:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner’s remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

28 U.S.C. § 1498(a).

²The patent application was filed and granted before the effective date of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011). Consequently, in considering the issues in this case, the court relies upon the law in force at the time of issuance. *See Tobinick v. Olmarker*, 753 F.3d 1220, 1223 n.1 (Fed. Cir. 2014).

- a) receiving a mailpiece with a mail singulation apparatus, the mailpiece having a mailstop affixed thereon;
- b) identifying the mailstop associated with the mailpiece;
- c) assigning the mailstop to one of a plurality of receiving bins if the mailstop has not already been assigned to a receiving bin, each of the receiving bins capable of emptying its contents upon receiving a command to empty its contents;
- d) conveying the mailpiece to the receiving bin assigned with the mailstop associated with the mailpiece and depositing the mailpiece into the receiving bin; and
- e) wherein if and when all of the plurality of receiving bins have been assigned with a mailstop and a new received mailpiece is identified with a new mailstop that has not been assigned to a receiving bin, the method further comprising the steps of:
 - i) issuing a command to a first receiving bin to empty its contents whereupon the first receiving bin empties its contents into a receptacle,
 - ii) reassigning the first receiving bin with the new mailstop of the new received mailpiece, and
 - iii) conveying the new received mailpiece into the first receiving bin.

'693 patent, Claim 1 (emphasis added).

Claim 10, the second independent claim, describes:

A system for sorting mailpieces in a single pass, comprising:

- a) a mail singulation apparatus adapted for receiving a mailpiece having a mailstop affixed thereon and for presenting the mailpiece to a mailpiece scanning apparatus;
- b) a mailpiece scanning apparatus for scanning and identifying the mailstop of the mailpiece, the scanning apparatus operatively coupled to the singulation apparatus;
- c) a plurality of receiving bins, each bin capable of emptying its contents upon receiving a command to empty its contents;
- d) a conveyor apparatus operatively coupling the singulation apparatus to the plurality of receiving bins, the conveyor apparatus adapted to carry a mailpiece from the singulation apparatus to any one of the plurality of receiving bins; and
- e) a control system operatively coupled to the singulation apparatus, to the scanning apparatus, to each of the plurality of receiving bins and to the conveyor apparatus, wherein the control system is adapted to assign the mailstop to any one of the plurality of receiving bins, the control system further adapted to cause the conveyor apparatus to carry the mailpiece to the receiving bin assigned with the mailstop, the control system further adapted to cause the conveyor apparatus to carry the mailpiece to the receiving bin assigned with the

mailstop and deposit the mailpiece into the receiving bin, wherein the control system is further adapted to transmit a command to a first receiving bin to empty its contents if and when the scanning apparatus identifies a new mailpiece having a new mailstop after all of the receiving bins have been assigned a mailstop different from the new mailstop, the control system further adapted to reassign the first receiving bin with the new mailstop and to cause the conveyor apparatus to carry the new mailpiece to the first receiving bin and deposit the new mailpiece into the first receiving bin.

'693 patent, Claim 10 (emphasis added).

Mr. Cormack claims that the Postal Service infringed the '693 patent by contracting with Northrop Grumman Systems for the manufacture and delivery of mail sorting devices called Flats Sequencing Systems ("FSS"). Compl. ¶¶ 8-9, 32. Mr. Cormack specifically alleges that Northrop Grumman Systems, in accordance with the contract, actually manufactured and delivered 102 FSS machines that the Postal Service continues to use. Compl. ¶¶ 13, 15, 28.

PROCEDURAL HISTORY

Because the Postal Service's contract with Northrop Grumman Systems contained an indemnity clause, the court granted Northrop Grumman Systems's motion to intervene as a defendant-intervenor. *See Cormack v. United States*, 117 Fed. Cl. 392, 396 (2014) ("*Cormack I*") (addressing discovery disputes).³ After explication by the parties of issues and defenses, and completion of some discovery, the parties submitted briefs on claim construction and presented oral arguments at a *Markman* hearing held on August 27, 2014. Of the 11 terms in the '693 patent identified by the parties as requiring construction, two have a mutually acceptable construction. The court adopts the parties' agreed constructions of those two terms. With respect to the nine disputed terms, the constructions adopted by the court are specified below.

DISCUSSION

A. Standards for Construction

"Claim construction is a legal statement of the scope of the patent right." *CardSoft v. Verifone, Inc.*, __ F.3d __, __, 2014 WL 5303000, at *2 (Fed. Cir. Oct. 17, 2014) (citing *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1276-77 (Fed. Cir. 2014)). The construction and meaning of claims in a patent are questions of law for the court to address. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-90 (1996). While the trial court is not required to construe every term in a patent, it must construe any term for which claim scope is disputed. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360, 1362 (Fed. Cir. 2008). The court should first examine the intrinsic evidence of record, as "intrinsic evidence is the most significant source of the legally operative meaning of disputed claim

³A subsequent opinion concerned discovery of documents claimed to be protected against disclosure by the attorney-client privilege. *See Cormack v. United States*, 118 Fed. Cl. 39 (2014) ("*Cormack II*").

language.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Intrinsic evidence encompasses the “patent itself, including the claims, the specification[,] and . . . the prosecution history.” *Id.* (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996)).

In construing claim terms, a court should look to the ordinary and customary meanings attributed to them by those of ordinary skill in the art at the date of the invention, which is the effective filing date of the patent application. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). “That starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Id.* “There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). “The standards for finding lexicography and disavowal are exacting.” *Id.* When a patentee acts as a lexicographer and uses terms in a manner other than their ordinary meaning, “the special definition of the term [must be] clearly stated in the patent specification or file history.” *Vitronics*, 90 F.3d at 1582 (citing *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1578 (Fed. Cir. 1996)); *Hormone Research Found., Inc. v. Genentech, Inc.*, 904 F.2d 1558, 1562 (Fed. Cir. 1990). Therefore, a court must review the patent’s specification “to determine whether [an] inventor has used any terms in a manner inconsistent with their ordinary meaning.” *Id.* However, a court must avoid “importing limitations from the specification into the claims.” *Phillips*, 415 F.3d at 1323. And, prosecution history may also be examined, principally to exclude interpretations disclaimed during prosecution. *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005); *Vitronics*, 90 F.3d at 1582-83.

Extrinsic evidence, encompassing “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises,” *Markman*, 52 F.3d at 980, can also be used to determine a term’s meaning, *CardSoft*, __ F.3d at __, 2014 WL 5303000, at *2, but it is “less significant than the intrinsic record” in the construction process, *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

B. *Specific Terms of the Claims Requiring Construction*

Term 1: “sorting mailpieces in a single pass.”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
<p>The preamble is not a limitation.</p> <p>Alternatively, to the extent that the preamble is limiting, it limits the claim to “those sorting methods or systems that perform all of the subsequently recited steps in one pass of mail through the sort process or system”</p>	<p>“[A]chieving sortation of unsorted mail without taking mailpieces from the output end, reloading into the input end, and reprocessing the mailpieces further”</p>

The identified term, “sorting mailpieces in a single pass,” appears in independent Claims 1 and 10. Defendants’ proffered interpretation defines “single pass” in terms of reloading and reprocessing, submitting that in a “single pass” machine, there is no need to run each piece of mail through the machine multiple times to achieve sortation. Defs.’ Br. at 21.⁴ Defendants contrastingly define a “multi-pass” system as one that requires “tak[ing] a portion of the mailpieces from the output end, then manually reload[ing] them into the input end of the machine and reprocess[ing] the mailpieces further.” *Id.* (quoting the ’693 patent, col. 1, lines 41-44). Defendants maintain that a mail sorting system cannot simultaneously be both “single-pass” and “multi-pass,” asserting that such a result would be “illogical.” *Id.* at 23; *see also* Defs.’ Reply at 4-5.

Plaintiff counters that “single pass” in the preamble “is not limiting, but rather clarifies that the method or system claimed refers to those sorting methods or systems that perform all of the subsequently recited steps in a pass of mail through the sort process.” Pl.’s Br. at 4.⁵ While the steps are capable of completing sortation without reloading, plaintiff argues that nothing in Claims 1 and 10 or in the specification prohibits an operator from reprocessing some or all of the mail through the system identified in the ’693 patent. *Id.* at 4, 6-7.⁶

The parties do not distinguish the meaning of “single pass” as applied to a method versus a system. Mr. Cormak’s patent incorporates both an independent method claim (Claim 1) and an independent system claim (Claim 10). *See, e.g., Bandag, Inc. v. Al Bolser’s Tire Stores, Inc.*, 750 F.2d 903, 922 (Fed. Cir. 1984) (“It is commonplace that the claims defining some inventions can by competent draftsmanship be directed to either a method or an apparatus. The inventor of such an invention has the option as to the form the claims in his patent will assume. There is nothing improper in this state of affairs . . .”) (internal citation omitted); *see also Hill-Rom Servs.*, 755 F.3d at 1370 (addressing construction of claims directed both to systems and methods). The “Summary of the Invention” in the ’693 patent’s preamble describes the system and method as follows:

A method and system for sorting incoming mail is provided. An embodiment of the *system* includes a fewer number of receiving bins than the required number of sort destinations or mailstops and *can handle the mailpieces*

⁴The government and Defendant-Intervenor Northrop Grumman Systems Corp. filed a joint claim construction opening brief, *see* Defs.’ Opening Claim Construction Br. (“Defs.’ Br.”), ECF No. 65, and a joint responsive brief, *see* Defs.’ Claim Construction Reply Br. (“Defs.’ Reply”), ECF No. 73.

⁵The specification essentially defines a single-pass method or system in these terms. *See* ’693 patent, col. 1, lines 31-34 (“When the sorting apparatus has the same number of required sort destinations as it has receiving bins, then the sorting process can be handled *with a single[]pass of the mailpieces through the apparatus.*” (emphasis added)).

⁶Plaintiff observes that reprocessing may be useful for purposes of calibration or sortation based on discrete criteria. Pl.’s Br. at 6. Plaintiff also suggests that the claimed machine may employ a continuous conveyor that allows some mailpieces to reenter the mailpiece scanning apparatus. *Id.* at 5.

using a single-pass sort process. An embodiment of the *method* includes using sorting algorithms and the automatic discharging of receiving bins *to provide single-pass sorting of mailpieces* with a fewer number of receiving bins than required sort destinations.

'693 patent, col. 1, line 62 to col. 2, line 3 (emphasis added).

Where it appears in Claims 1 and 10, “single pass” refers to a process rather than to a device or apparatus. As applied generally in the '693 patent, it appears that “single pass” refers to the number of times that mail is loaded and processed, *i.e.*, once. This usage comports with the traditional application of the term. The use of the term “single pass” in the preamble of the independent claims coupled with consideration of the embodiments described in the specification establish that “single-pass sortation” would be understood by those of skill in the art as consisting of a particular scheme or assemblage of apparatus and set of algorithms that achieve sortation in one pass, *i.e.*, without reloading mailpieces for reprocessing. In further support of this traditional definitional approach, defendants have proffered a declaration by Douglas B. Quine, an inventor and consultant in mail sorting applications, who provided a historical review of such applications. *See* Defs.’ Br., Attach. (Decl. of Douglas B. Quine (July 20, 2014)) (“Quine Decl.”).⁷ Dr. Quine opined that “‘single[]pass’ refers to mail sorting algorithms or schemes that achieve sortation in one pass . . . [such that] there is no need to run each piece of mail through the machine multiple times.” Quine Decl. at 14.⁸

⁷Dr. Quine traced the development of mail sorting machines back to U.S. Patent 1,324,247, issued Dec. 9, 1919, based upon an application filed Dec. 3, 1913, entitled “Mail-Distributing Apparatus.” *See* Quine Decl. at 3-4.

⁸Mr. Cormack objects to the court’s consideration of part of Dr. Quine’s declaration. *See* Pl.’s Mot. to Strike Portions of Decl. of Dr. Douglas Quine, ECF No. 69. Specifically, Mr. Cormack asks the court to elide paragraphs 49-106 of the Quine Declaration. *Id.* at 1. Those paragraphs encompass a commentary on the prosecution history of the '693 patent, Quine Decl. ¶¶ 44-55, and opinions on the proper meaning of claim terms disputed by the parties, *id.* ¶¶ 56-108. Plaintiff contends that expert testimony on claim construction is ordinarily inappropriate, Pl.’s Mem. in Support of Motion to Strike (“Pl.’s Strike Mem.”) at 3, ECF No. 69-1 (citing *Endress + Hauser, Inc. v. Hawk Measurement Sys. Pty. Ltd.*, 122 F.3d, 1040, 1042 (Fed. Cir. 1997)), particularly where the underlying technology is understandable to the court in light of the intrinsic evidence, *id.* at 4 (citing *Vitronics*, 90 F.3d at 1585). Defendants oppose the motion to strike, primarily on the ground that Dr. Quine is a technical expert in the relevant field who can appropriately opine on what the claim language would mean to a person of ordinary skill in the pertinent art. Defs.’ Opp’n to Pl.’s Mot. to Strike Portions of Dr. Quine’s Decl. at 4, ECF No. 72.

The court has in the past adopted a proposal by parties to hold a technical tutorial to deal with an area with which the court was not familiar. *See Fastship, LLC v. United States*, 114 Fed. Cl. 499, 503-04 (2013) (setting out claim construction for two ship design patents). In this case, the parties agreed that such a technological primer was not necessary, *see* Pl.’s Strike Mem. at 6, and the court concurred. Nevertheless, the court has accepted the portions of Dr. Quine’s Declaration that provide a historical background in mail sorting technology, *see* Quine Decl. ¶¶

As a matter of law, plaintiff points out that “the preamble of a claim is generally not considered to be limiting,” Pl.’s Br. at 4 (citing *Allen Eng’g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002)), except where the preamble “is necessary to breathe life and meaning in[t]o the claim language, or if subsequent limitations rely on the preamble to provide antecedent basis,” *id.* (citing *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)). Plaintiff concedes that “the preamble serves to identify the context in which to read the claim limitations.” *Id.* Although that context might be helpful in claim construction, plaintiff cites *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422 (Fed. Cir. 2000), for the proposition that “the preamble is not limiting if it ‘merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention.’” *Id.* (quoting *IMS Tech.*, 206 F.3d at 1434-35).

Here, for the method claim set out in independent Claim 1, the preamble limits and delineates the purpose of the steps described. The specification explains that “[a]n embodiment of the method includes using sorting algorithms and the automatic discharging of receiving bins to provide single-pass sorting of mailpieces with a fewer number of receiving bins than required sort destinations.” ’693 patent, col. 1, line 66 to col. 2, line 3. There is no other exegesis in the specification that bears on the method claim. Accordingly, insofar as that claim is concerned, the preamble serves to give meaning to the claim language, in effect providing an antecedent basis for that language. This context suggests that the single-pass term in the preamble of Claim 1 constitutes a limitation for that Claim. See *Catalina Mktg.*, 289 F.3d at 808; see also *Vizio, Inc. v. International Trade Comm’n*, 605 F.3d 1330, 1340 (Fed. Cir. 2010); *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 1333 (Fed. Cir. 2003); cf. *Bristol-Myers Squibb Co. v. Ben Venue Labs, Inc.*, 246 F.3d 1368, 1375 (Fed. Cir. 2001) (holding a preamble to be non-limiting where steps of a claimed method are performed the same way regardless of whether the preambular purpose is achieved, but recognizing that a preamble may limit a method when employed to distinguish a new use of a prior art apparatus or process.). In effect, for the method claim, plaintiff relied upon the preambular statement of use “during prosecution to distinguish the claimed invention from the prior art,” *Catalina Mktg.*, 289 F.3d at 808, and that reliance “transforms the preamble into a claim limitation,” *id.*, see also *Bass Pro Trademarks, LLC v.*

14-48, and the court has considered that background in its claim construction analysis. Those portions of Dr. Quine’s declaration provide a review of the state of the art at the time the ’693 patent was filed, engendering no objection from Mr. Cormack. See *Vitronics*, 90 F.3d at 1585 (acknowledging a trial court’s discretion to hear and admit testimony from experts on technological background). The other portions of Dr. Quine’s declaration, however, would offer expert opinion on issues of law, and that role is inappropriate. See *Rumsfeld v. United States*, 315 F.3d 1361, 1369 (Fed. Cir. 2003) (holding that interpretation of federal regulations constituted an issue of law, and the views of experts on the interpretative issues were irrelevant and should not be received). Claim construction is similarly an interpretative task for the court, once the scientific field has been appropriately described. See *Endress + Hauser*, 122 F.3d at 1042; cf. *Cytologix Corp. v. Ventura Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005) (noting the analogous impropriety of adducing expert testimony on claim construction in a jury trial). Consequently, Mr. Cormack’s motion to strike will be granted.

Cabala's, Inc., 485 F.3d 1364, 1368-69 (Fed. Cir. 2007); *DeSena v. Beekley Corp.*, 729 F. Supp. 2d 375, 381 (D. Me. 2010).⁹

Although the system claim set out in independent Claim 10 employs similar preambular language, *viz.*, “[a] system for sorting mailpieces in a single pass, comprising . . .,” ’693 patent, col. 9, lines 12-13, that preamble rests on a different footing. As the Federal Circuit stated in *Catalina Marketing* in addressing system claims based upon specific apparatus, “preambles describing the use of an invention generally do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure.” *Catalina Mktg.*, 289 F.3d at 809 (citing *In re Gardner*, 171 F.2d 313, 315-16 (C.C.P.A. 1948) (“It is trite to state that the patentability of apparatus claims must be shown in the structure claimed and not merely upon a use, function, or result thereof.”)). “[S]pecifically, this means that a patent grants the right to exclude others from making, using, selling, offering to s[ell], or importing the claimed apparatus or composition for any use of that apparatus or composition, whether or not the patentee envisioned such use.” *Id.* (citing 35 U.S.C. § 271 (1994)). Because the gist of the system claim in independent Claim 10 consists of specific items of apparatus, these teachings apply.

In the “Summary of the Invention,” in describing “[a]n embodiment of the system,” the specification states that the embodiment “includes a fewer number of receiving bins than the required number of sort destinations or mailstops and *can handle* the mailpieces using a single-pass sort process.” ’693 patent, col. 1, lines 63-66 (emphasis added). The language “can handle” is permissive, suggesting that the system need not be confined to achieving sortation strictly through one pass of mail. *See also id.*, col. 1, lines 41-57 (using permissive language to note, “[i]t is . . . desirable to provide a mail sorting method and system *having the ability to* sort incoming mailpieces using a single pass process.” (emphasis added)); *id.* at Abstract (“[T]he system *can* sort mail destined for ‘m’ mailstops into ‘n’ receiving bins where ‘m’ is greater than

⁹The examiner initially rejected Mr. Cormack’s application on the ground that a prior patent issued to Affaticati, *et al.*, U.S. Patent 5,588,520, disclosed a system and method for sorting mailpieces in a single pass, involving a mail singulation apparatus, a mailpiece scanning apparatus, a plurality of receiving bins, and a central system coupled to the singulation apparatus, the scanning apparatus, and the receiving bins. *See* Prosecution History at CLC_000333. (The Prosecution History was submitted to the court in paper form on August 6, 2014, and is available in the court’s file.) The examiner also cited applications filed by Quine, No. 2006/0124512 A1, and Norris, *et al.*, No. 2006/0016738 A1. Mr. Cormack responded by contending that (1) Affaticati did not teach a control system adapted to assign a mailstop. *Id.* at CLC_000375, -79, (2) Quine disclosed a multi-pass sorting process, *id.* at CLC_000379, and (3) Norris concerned identifying means, *i.e.*, printing destination information, *id.* at CLC_000394. The examiner again rejected the claims, but he accepted that Mr. Cormack had stated allowable subject matter for a single-pass system that disclosed identifying and emptying a sortation bin and assigning it a new mailstop to receive new mail. *Id.* at CLC_000395. The examiner advised that claims would be allowable in an independent form that included all pertinent limitations. *Id.* When Mr. Cormack complied, stating the independent claims in their present form, the patent was allowed. *Id.* at CLC_000422. All of the focus was on a single-pass system, albeit not a traditional one.

‘n.’” (emphasis added)). While a distinguishing characteristic of the system is that it is capable of employing a “single-pass” process, another central feature is the incorporation of a “fewer number of receiving bins than [the] required [number of] sort destinations.” ’693 patent, col. 2, lines 2-3. The reduced number of receiving bins allows the system identified in the ’693 patent to take advantage of both the lower cost and smaller footprint of a “multi-pass” system and the increased speed and reduced wear and tear of a traditional “single pass” system.¹⁰ Nothing in Claim 10 or the specification bars, or suggests a prohibition on, removing mailpieces from a receiving bin and reprocessing them through the sorting apparatus. *See* Pl.’s Br. at 6-7. Among other things, Claim 10 does not preclude use of a continuous conveyor system, ’693 patent, col. 5, lines 3-15, or organization of the mail by criteria other than mailstop, or programming the system with different tasks, ’693 patent, col. 4, lines 48-52. These alternatives to a traditional, pure one-pass system are specifically contemplated by the patent. *See American Piledriving Equip., Inc. v. Geoquip, Inc.*, 637 F.3d 1324 (Fed. Cir. 2011); *see also Tilghman v. Proctor*, 102 U.S. 707, 728-29 (1880) (noting that the inventor of a process must describe at least one particular mode of applying the process to show its utility but he is “not bound to describe them all in order to secure to himself the exclusive right to the process”). What distinguishes the system claimed in the ’693 patent is its capability of sorting mail in a single pass where there are fewer receiving bins than mailstops. The open-ended structure of Claim 10 permits the claimed system to be modified to perform prior or subsequent tasks that may involve additional mail processing. *See* Pl.’s Reply Claim Construction Br. (“Pl.’s Reply”), at 8-9, ECF No. 74.

Accordingly, the court will construe separately Term 1 as used in Claim 1, *viz.*, “a method for sorting mailpieces in a single pass,” and Term 1 as used in Claim 10, *viz.*, “a system for sorting mailpieces in a single pass.” The court adopts the following definition of Term 1 in Claim 1: “a method for sorting mailpieces in a single pass” means **a method that achieves sortation in one pass, without reloading and reprocessing mailpieces**. The court adopts the following definition of Term 1 in Claim 10, *viz.*, “a system for sorting mailpieces in a single pass” means **a system that can perform all of the subsequently recited steps in one pass of mail through the system**. These constructions conceptually are very similar but not identical, adjusting the one-pass paradigm to fit the different usage in a method claim as contrasted to a system claim. Ordinarily, the same term in different claims of a patent would have the same construction. *See Phillips*, 415 F. 3d at 1314 (“Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.”). In this instance, however, the context of the two types of claims requires a modicum of differentiation.¹¹

¹⁰*See* ’693 patent col. 1, lines 49-58 (“The trade-off for the smaller and less-costly multi-pass machines is that they are considerably slower and more costly to operate Mailpieces in multi-pass machines experience more wear and tear th[an] in a single-pass machine. It is, therefore, desirable to provide a mail sorting method and system having the ability to sort incoming mailpieces using a single-pass process with fewer receiving bins than the number of mailstops being sorted.”); *see also* Quine Decl. at 14-15.

¹¹The specification makes this differentiation. The summary of the invention described an embodiment of the system in a different manner than an embodiment of the method:

Term 2: “bin”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
This is not a claim term independently from “receiving bin” and it is redundant to construe separately. See plaintiff’s construction for “receiving bin” below.	“[A] container”

Term 2 appears in independent Claims 1 and 10. The court’s construction of the term should encompass both such uses. The government submits that the court should adopt the plain and ordinary meaning of “bin,” *i.e.*, a container. Defs.’ Br. at 24. Plaintiff argues that the court should avoid construing the term “bin” separately from its interpretation of the more complete term “receiving bin,” reasoning that otherwise the term becomes redundant. Pl.’s Br. at 7-8. The term “bin” does not appear in the patent independently from “receiving bin,” another term for which both parties have submitted proposed constructions. *See* Pl.’s Br. at 7.¹² Therefore, the court declines to separately construe the term “bin.”

Term 3: “receiving bin”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
“A collection point for sorted mailpieces”	“A [container] for temporarily holding mailpieces during a pass”

Term 3 appears in independent Claims 1 and 10. The parties disagree on two matters: (1) whether a “bin” is a container; and (2) whether a “receiving bin” is designed to temporarily hold mailpieces or to serve as a “collection point” for sorted mailpieces. *See* Defs.’ Br. at 25. Defendants aver that based on the language of the claims and Mr. Cormack’s description of his invention in the Invention Disclosure Questionnaire, a receiving bin differs from other components of the system because it must be emptied during a pass after temporarily holding mail for a mailstop. *Id.* at 25-27. Plaintiff instead argues that the distinguishing feature of a

An embodiment of the *system* includes a fewer number of receiving bins than the required number of sort destinations or mailstops and *can handle the mailpieces using a single-pass sort process*. An embodiment of the *method* includes using sorting algorithms and the automatic discharging of receiving bins to *provide single-pass sorting of mailpieces* with a fewer number of receiving bins than required sort destinations.

’693 patent, col. 1, line 63 to col. 2, line 3. One drawing in the patent is directed to a method, while seven depict a system. *See* ’693 patent, col. 3, lines 35-53.

¹²The only time “bin” is used alone is in Claim 10, clause (c), where it follows immediately after “receiving bin” and thus has that antecedent.

receiving bin is its service as a collection point because once a mailpiece is deposited into the receiving bin to which the pertinent mailstop has been assigned, it is considered “sorted.” Pl.’s Br. at 8.¹³

While defendants’ proffered construction reflects a receiving bin’s physical structure, plaintiff’s interpretation better captures its function. As defendants note, the ordinary meaning of the term “bin” is a container. *See, e.g., The American Heritage College Dictionary* (online ed. 2014) (defining “bin” as “[a] container or enclosed space for storage”); *Merriam-Webster Dictionary* (online ed. 2014) (defining “bin” as “a box, frame, crib, or enclosed place used for storage”). Plaintiff’s use of the term “collection point” is too general because it encompasses surfaces and places that would not qualify as bins. However, defendants’ interpretation regarding the purpose of a receiving bin is overbroad in that it could apply to many different structures in a mail sorting machine. Plaintiff’s construction more aptly captures the features differentiating a receiving bin from other structures that may also temporarily hold mailpieces during a pass (*e.g.*, the conveyor apparatus and the mailpiece scanner apparatus).

For the reasons stated, the court adopts an amalgam of the parties’ proffered definitions of Term 3: “receiving bin” means **a container or enclosed place that serves as a collection point for sorted mailpieces.**

Term 4: “mailstop”

Parties’ Proposed Claim Construction
“Sorting destination, such as a delivery point or address”

Term 4 appears in Claims 1 and 10. The parties agree on the proper construction of “mailstop” and the court accepts the parties’ proffered construction. Term 4, “mailstop,” means **sorting destination, such as a delivery point or address.**

Term 5: “a command”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
“An instruction from a controller”	“An instruction”

Term 5 appears in Claims 1 and 10. The parties agree that “a command” means “an instruction;” however, they disagree over whether “a command” must be issued from a controller. Plaintiffs argue that one skilled in the art would understand “command” to mean the kind of instruction issued from a controller in a control system. Pl.’s Br. at 10-11. Defendants contend that the meaning of “command” is broader than plaintiff’s definition and encompasses instructions from other sources. Defs.’ Br. at 27. Defendants correctly observe that the word “controller” is never mentioned in the ’693 patent. *Id.* Because nothing in the claim language

¹³Defendants concede that receiving bins collect mailpieces during a pass. Defs.’ Reply at 9.

limits “a command” to apply only from a controller, the court declines to narrow the definition of the term beyond its plain meaning.

The court draws upon defendants’ proffered construction to conclude that Term 5, “a command” means **an instruction**.

Term 6: “assigning the mailstop to one of a plurality of receiving bins” and “assign the mailstop to any one of the plurality of receiving bins”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
No construction needed	“Assigning the mailstop to one of a plurality of receiving bins after the sorting process has begun”

Term 6 appears in Claims 1 and 10. The parties dispute when the assignment of mailstops to receiving bins must occur. Under defendants’ construction, the assignment of mailstops to receiving bins must happen only after the sorting process has begun. Under the plaintiff’s construction, the assignment may occur at any time. Defendants’ construction is problematic for two reasons. First, that interpretation fails to specify when the sorting process begins. Second, there is no indication in the specification or the claims of any chronological limitation. *See TDM Am., LLC v. United States*, 85 Fed. Cl. 774, 789 (Fed. Cl. 2009) (“The recited steps in a method claim do not have to be performed in the sequence recited in the claim unless logic, grammar, or the specification so require.”) (citing *Interactive Gift Express, Inc. v. Compuserve4 Inc.*, 256 F.3d 1323, 1342-43 (Fed. Cir. 2001)). Defendants impermissibly read a limitation into otherwise unambiguous language. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 876-81 (Fed. Cir. 2004) (finding that the claim language “regularly received television signal” did not limit the disputed phrases to any particular type of technology or signal format); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002) (cautioning against limiting the claimed invention to preferred embodiments or specific examples in the specification) (citing *CCS Fitness v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)).

For the reasons stated, the court concludes that no construction of Term 6 is needed.¹⁴

Term 7: “assigning the mailstop . . . if the mailstop has not already been assigned to a receiving bin”

¹⁴*See United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“The *Markman* decisions do not hold that the trial judge must repeat or restate every claim term in order to comply with the ruling that claim construction is for the court. Claim construction . . . is not an obligatory exercise in redundancy.”)

Contrary to defendants’ assertions, there is no indication that plaintiff’s construction “seeks to broaden claim 1” by implicitly adding “of the plurality of receiving bins” to the end of the claim term. Defs.’ Br. at 31-32.

Plaintiff's Proposed Claim Construction	Defendants' Proposed Claim Construction
No construction needed	"[A]ssigning a mailstop if the mailstop has not already been assigned to any receiving bin in the system"

Term 7 appears in Claim 1. The plaintiff argues the term is unambiguous and no construction is needed. Defendants argue that their construction better embodies the purpose of the invention, "to use *fewer* receiving bins than mailstops, *not* to assign multiple receiving bins to the same mailstop at the same time." Defs.' Br. at 31 (emphasis in original). Defendants' proposal adds additional words and restrictions without support from the language of the claims. *See American Piledriving*, 637 F.3d at 1331 ("[T]he role of a district court in construing claims is not to . . . read limitations into the claims to obviate factual questions of infringement and validity but rather to give meaning to the limitations actually contained in the claims."). Moreover, as the plaintiff observes, defendants fail to define "the system" to which it refers in its proposed construction, for no system is mentioned in Claim 1, which is the independent method claim of the '693 patent. *See* Pl.'s Br. at 14.

For the reasons stated, the court concludes that no construction of Term 7 is needed.

Term 8: "assigned with the mailstop;" "assigned with a mailstop;" "assigned with the mailstop;" and "assigned a mailstop"

Plaintiff's Proposed Claim Construction	Defendants' Proposed Claim Construction
No construction needed	"[A]ssigned with only one mailstop"

Term 8 appears in Claims 1 and 10. Defendants contend that Term 8 would be understood by a person of ordinary skill in the art to mean "assigned with only one mailstop." Defs.' Br. at 34. Defendants cite as their justification the fact that according to the '693 patent, the control system empties a receiving bin when the number of mailstops exceeds the number of receiving bins and assigns the new mailstop to the emptied bin. *See* Defs.' Br. at 34-35 (citing '693 patent, Abstract).¹⁵ Defendants also cite a pre-litigation statement by Mr. Cormack that only one mailstop is ever assigned to a receiving bin. *Id.* at 35-36. The statement cited by defendants does not carry the weight they assign to it. The statement provided "an example," and it did not purport to exclude other examples.¹⁶ Nothing in the claims or the specification

¹⁵In support, defendants cite figures from the specification showing four receiving bins. *See* Defs.' Br. at 35 (citing '693 patent, col. 5, lines 30-32, and col. 5, line 62 to col. 6, line 35). Defendants conclude with the postulate that "[n]o receiving bin is ever assigned to more than one mailstop." *Id.* The specification, however, nowhere contains such a categorical, exclusionary conclusion.

¹⁶In the statement, Mr. Cormack said:

As an example, my machine may be configured with 40 bins. As mail is put in it will sort the mailstops to the available bins. Eventually all

prevents a receiving bin from being assigned multiple mailstops or multiple bins being assigned to a single mailstop. It is a basic tenet of claim construction that “a” may not be interpreted as “only one” without express support in the specification. *See 01 Communique Lab., Inc. v. LogMeIn, Inc.*, 687 F.3d 1292, 1297 (Fed. Cir. 2012); *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008) (“That ‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely as a presumption or even a convention. The exceptions to this rule are extremely limited: a patentee must evince[] a clear intent to limit ‘a’ or ‘an’ to ‘one.’”) (internal citations omitted); *TiVo, Inc. v. EchoStar Commc’ns Corp.*, 516 F.3d 1290, 1303-04 (Fed. Cir. 2008) (“As a general rule, the words ‘a’ or ‘an’ in a patent claim carry the meaning of ‘one or more.’” (citing *Baldwin Graphic Sys.*, 512 F.3d at 1342-43)). One of the benefits of the dynamic reassignment methodology disclosed in the patent is its flexibility. *See* ’693 patent, col. 2, lines 26-31, and col. 8, lines 11-25. Term 8 is unambiguous and should not be restricted beyond its plain meaning.

For the reasons stated, the court concludes that no construction of Term 8 is necessary.

Term 9: “new . . . mailpiece” and “new mailpiece”

Plaintiff’s Proposed Claim Construction	Defendants’ Proposed Claim Construction
“A mailpiece that is distinct from the mailpiece previously recited in the claim”	“[A] mailpiece that has not yet previously been processed by the sorting apparatus”

Term 9 appears in Claims 1 and 10. Plaintiff contends that “new” is a patent term-of-art, signaling an instance of an object that is of the same type as, but distinct from, an object previously recited in the claim. Pl.’s Br. at 16. Defendants argue instead that “new” should be read in conjunction with “mailpiece” to refer to a specific class of mail: *i.e.*, mail that has not previously been processed. Defs.’ Br. at 36-37. Both parties justify their respective constructions by appealing to the purposes and scope of Mr. Cormack’s claimed invention. Defendants argue that their proposed construction is consistent with their view that the claimed method and system only allow for mail to be processed once. *Id.* Plaintiff contends instead that Mr. Cormack’s claimed invention does not prohibit some or all of the mailpieces from being reprocessed and therefore defendants’ construction would be unduly restrictive. Pl.’s Br. at 17.

As discussed in the construction of Term 1, “sorting mailpieces in a single pass,” *supra*, nothing in the claims or specification prohibits some or all of the mailpieces from being reloaded and reprocessed in Mr. Cormack’s system in independent Claim 10. While Mr. Cormack’s claimed method restricts mail to being processed one time, the applicable apparatuses of the

40 bins will fill. At this point the machine will be holding mail belonging to 40 different mailstops. When the 41 mailstop mailpiece is entered into the conveyor system, my machine will automatically empty the oldest or most full bin to make room for the new mailstop.

Defs.’ Br. at 35-36 (quoting *id.* Ex. 8, at CLC-005822).

system may be used to process mailpieces more than once. Therefore, defendants' construction adds a limitation without the support of any intrinsic evidence.

For the reasons stated, the court adopts the following definition of Term 9: "new ... mailpiece" and "new mailpiece" mean **a mailpiece that is distinct from the mailpiece previously recited in the claim.**

Term 10: "new mailstop"

Parties' Proposed Claim Construction
"[A] mailstop that is distinct from the mailstop previously recited in the claim"

Term 10 appears in Claims 1 and 10. The parties agree on the proper construction of "new mailstop." The court accepts the construction proffered by the parties. Term 10, "new mailstop" means **a mailstop that is distinct from the mailstop previously recited in the claim.**

Term 11: "receptacle"

Plaintiff's Proposed Claim Construction	Defendants' Proposed Claim Construction
"A receiving structure"	"A container distinct from the receiving bins"

Term 11 appears in Claim 1. The parties disagree over whether a receptacle may be the same structure as the "receiving bin" that empties into it. Plaintiff avers that "[t]he purpose of the receptacle is to allow a receiving bin to empty its contents while still retaining the sorted status of those contents. The receptacle is distinct from the receiving bins only to the extent that contents can be considered to have been emptied from one into the other." Pl.'s Br. at 19. Defendants instead assert that the language of Claim 1 indicates that both structures are distinct. Defs.' Br. at 38-40.

A basic tenet of claim construction presumes that different words in a claim have different meanings. *See, e.g., CAE Screenplates Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) ("In the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings.") (citing *Tandon Corp. v. United States Int'l Trade Comm'n*, 831 F.2d 1017, 1023 (Fed. Cir. 1987)); *TDM Am. LLC*, 85 Fed. Cl. at 803-05 (concluding that "containment receptacle" was separate and distinct from the "mixing container" that emptied into it). In this instance, the use of two different terms in the phrase in Claim 1, *viz.*, "[a] first receiving bin empties its contents into a receptacle," indicates that a receptacle is distinct from a receiving bin. In addition, while plaintiff's construction correctly captures a defining characteristic of a receptacle – that it receives the contents of a receiving bin – plaintiff's use of "structure" lacks adequate definition and "container" is a more appropriate interpretation.

For the reasons stated, the court adopts an amalgam of the constructions proffered by the parties and construes Term 11, "receptacle," to mean **a receiving container distinct from receiving bins.**

CONCLUSION

For the reasons explained above, the terms of the '693 patent identified by the parties as requiring construction shall be construed as stated.¹⁷

It is so ORDERED.

s/ Charles F. Lettow

Charles F. Lettow

Judge

¹⁷Pl.'s Mot. to Strike Portions of Decl. of Dr. Douglas Quine, ECF No. 69, is GRANTED for the reasons stated *supra*, at 7-8 n.8.